

REMARKS

Reconsideration of the rejection of the subject matter of this application is requested.

Status of Claims

Claims 1-6 and 8-15 are presented for consideration. The subject matter of claim 7 has been combined with claim 6 and claim 7 canceled.

The Drawing

The drawing has been objected to since there are several inconsistencies between the reference numbers in the drawing and the reference numbers referred to in the specification. These, as well as some not raised in the Office action, have been addressed by changes in the specification. It is believed that the description is now clear and conforms to the figures.

Objections

The objections of record that have been addressed in this paper are:

The disclosure is objected to due to several inconsistencies with the figures. These are mentioned above. They have been corrected by appropriate amendments to pages 14, 16, and 18 of the specification.

Claim 3 is objected to due to an informality. This has been corrected in the amendment above.

Rejections

The rejections of record that are intended to be responded to below are:

Claims 12-15 stand rejected under 35 U.S.C. 112 for an improper antecedent in independent claim 12. Proper antecedent basis in claim 12 has been provided in the amendment above.

Claims 1-11 stand rejected under 35 U.S.C. 103(a) as unpatentable over Majeti et al. in view of Delvaux.

Claims 12-15 stand rejected under 35 U.S.C. 103(a) as unpatentable over Majeti et al. in view of Delvaux, and further in view of Tomlins.

Argument

Prior to addressing the specific rejections on prior art, a review of some of the important aspects of the invention may provide useful background for the remarks below.

A feature of the invention is the provision of two classes of transmission service. The need for this is based on the recognition that standard DOCSIS users, so-called legacy users, need to be provided service, but do not require the same level of service as other users. The two classes of users are identified by two different address groups. (It should be evident that more than two groups could be designated in the same manner, and each assigned a different level of data processing and transmission quality.) Accordingly, the claimed system and method have a high quality, data stream, referred to as FastChannel service, and a standard quality and bit rate service for the legacy users. Recognizing this need

the inventors have designed an integrated system that accommodates both. One advantage of this system is that the processor (tunnel device) that assigns the FastChannel packets is relieved of processing the packets for the standard service users. By bi-furcating the data processing internally of the system other efficiencies are possible. For example, transmission channels assigned for the standard user traffic may have lower QoS. Since they are integrated in the system with FastChannel channels, channels for the two classes of service can be reassigned according to changing needs.

Turning to the prior art, none of the references cited recognize the advantages of processing data packets separately according to different address groups. The Majeti et al. patent describes a dynamic method for allocating traffic between multiple channels. However, all of the individual data packets are processed in the same manner.

The Delveaux patent describes a multiple channel system using inverse multiplexing. But again, there does not appear to be anything in the Delveaux system that makes obvious the allocation of data packets in a first address group on shared channels, and assigns data packets in a second address group to a single channel.

Claims 12-15 stand rejected under 35 U.S.C. 103(a) as unpatentable over Majeti et al. in view of Delvaux, and further in view of Tomlins. The Majeti et al and Deveraux references are discussed above. The Tomlins patent lacks the essential features noted above. Claims 12-15 are directed to a method that involves seven distinct steps. It is unclear which of these steps are found in which

of the three cited references. For example, which reference teaches the steps of dividing the incoming packets into a plurality of sub-packets, and addressing the sub-packets individually, where a single incoming packet may be divided and the parts addressed differently and assigned to different tunnel destinations.

Moreover, lacking in the combination as applied in the Office action is not only an explicit identification of the origin of the seven steps in the references, but also lacking in the rejection is a logical case for combining the three references, and especially for combining the three references in a logical order that yields the series of seven steps claimed.

In view of the amendments and remarks in this paper, allowance of claims 1-6 and 8-15 appears to be in order.

In the event that the Examiner concludes that a telephone call would advance the prosecution of this application, the Examiner is invited and encouraged to call the undersigned attorney at Area Code 757-258-9018.

Respectfully,



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